Please provide the following information, and submit to the NOAA DM Plan Repository.

Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

1. General Description of Data to be Managed

1.1. Name of the Data, data collection Project, or data-producing Program:

AFSC/RACE/GAP/McConnaughey: Pribilof Hydro-2009-From Archiver-Catchability Experiment, Bering Sea 38 KHz Acoustic Sediment Classification

1.2. Summary description of the data:

In stock assessment models, catchability is the link between an index of relative abundance from a fishery-independent survey and the modeled population size. For bottom trawl surveys that estimate the population size using swept-area methods, catchability can be estimated because it is largely determined by sampling efficiency (i.e. , the proportion of animals within the sampled area that is caught) which can be experimentally measured. However, estimating survey catchability is complicated because trawl efficiency has been shown to vary over a survey area in response to variation in bottom sediment type. Catchability experiments have been conducted on the bottom trawl used for the annual Eastern Bering Sea (EBS) survey, resulting in a survey-wide estimate of catchability for snow crab (Chionoecetes opilio) which, when included in the stock assessment model, produced significant changes in the Allowable Catch Limit. This catchability model accounted for spatial variation in trawl efficiency as a function of crab size, sex, depth, and sediment type. Unfortunately, sediment data over the geographic distribution of snow crab are quite fragmentary due to the remoteness of the area, and direct estimates of sediment properties such as grain size are generally unavailable at the trawl-sampling locations. In some cases, estimates were based on sediments collected over 60 miles away. The option to collect sediment data at all 270 trawl-sampling stations included in the snow crab distribution is prohibitively expensive considering the additional ship time required and the sample processing costs.

This project examined whether indices of bottom type, derived from calibrated ES-60 acoustic data collected at each snow crab sampling station and processed with IMPACT software produced by the Quester Tangent Corporation, are more informative in the snow crab bottom trawl catchability model than measured values of sediment type that were broadly extrapolated. This determination was based solely on the amount of spatial variation in the snow crab efficiency model that is explained by the two kinds of sediment information. While the currently used data are based on a directly measurable

attribute of the sediment (mean grain diameter), the acoustically derived index is related to this attribute but also to a variety of previously unmeasured variables affecting the time-dependent shape of the bottom echo.

1.3. Is this a one-time data collection, or an ongoing series of measurements?
One-time data collection

1.4. Actual or planned temporal coverage of the data:
2009-06-03 to 2009-07-30

1.5. Actual or planned geographic coverage of the data:
W: -178.175582, E: -159.656657, N: 62.025063, S: 54.832072

1.6. Type(s) of data:
(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)
Map (digital)

1.7. Data collection method(s):
(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)
Instrument: see abstract
Platform: unknown
Physical Collection / Fishing Gear: unknown

1.8. If data are from a NOAA Observing System of Record, indicate name of system:

1.8.1. If data are from another observing system, please specify:

2. Point of Contact for this Data Management Plan (author or maintainer)

2.1. Name:
Steve Intelmann

2.2. Title:
Metadata Contact

2.3. Affiliation or facility:

2.4. E-mail address:
steve.intelmann@noaa.gov

2.5. Phone number:
(206) 526-4157

3. Responsible Party for Data Management

Program Managers, or their designee, shall be responsible for assuring the proper management of

the data produced by their Program. Please indicate the responsible party below.

3.1. Name:
Bob McConnaughey

3.2. Title:
Data Steward

4. Resources
Programs must identify resources within their own budget for managing the data they produce.

4.1. Have resources for management of these data been identified?
No

4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):
Unknown

5. Data Lineage and Quality
NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.

5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible
(describe or provide URL of description):
Lineage Statement:
unknown

5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:

5.2. Quality control procedures employed (describe or provide URL of description):
unknown

6. Data Documentation
The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.

6.1. Does metadata comply with EDMC Data Documentation directive?
Yes

6.1.1. If metadata are non-existent or non-compliant, please explain:

6.2. Name of organization or facility providing metadata hosting:

NMFS Office of Science and Technology

6.2.1. If service is needed for metadata hosting, please indicate:

6.3. URL of metadata folder or data catalog, if known:
https://www.fisheries.noaa.gov/inport/item/22432

6.4. Process for producing and maintaining metadata
(describe or provide URL of description):
Metadata produced and maintained in accordance with the NOAA Data Documentation Procedural Directive: https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC_PD-Data_Documentation_v1.pdf

7. Data Access
NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.

7.1. Do these data comply with the Data Access directive?
No

7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?
Yes

7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:
None

7.2. Name of organization of facility providing data access:
Alaska Fisheries Science Center (AFSC)

7.2.1. If data hosting service is needed, please indicate:
Yes

7.2.2. URL of data access service, if known:
https://www.ncei.noaa.gov

7.3. Data access methods or services offered:
unknown

7.4. Approximate delay between data collection and dissemination:
Unknown

7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:

No delay

8. Data Preservation and Protection

The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.

8.1. Actual or planned long-term data archive location:

(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)

NCEI-MD

8.1.1. If World Data Center or Other, specify:

8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:

8.2. Data storage facility prior to being sent to an archive facility (if any):

Alaska Fisheries Science Center - Seattle, WA

8.3. Approximate delay between data collection and submission to an archive facility:

unknown

8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection

IT Security and Contingency Plan for the system establishes procedures and applies to the functions, operations, and resources necessary to recover and restore data as hosted in the Western Regional Support Center in Seattle, Washington, following a disruption.

9. Additional Line Office or Staff Office Questions

Line and Staff Offices may extend this template by inserting additional questions in this section.